

CURRICULUM VITAE

Personal Details

Name Prof. Ramia AL BAKAIN (she/her)

Nationality Jordanian

Place of work The University of Jordan, Faculty of Science, Department of Chemistry, Amman-Jordan

Education

Ph.D. Analytical and Bioanalytical Chemistry, **Sorbonne Université Pierre et Marie-Curie, Paris-France.**

Publications

- 1) M. Ramzan, Z. Nisa, A. Raza, R. Abdel-Massih, **Ramia Al Bakain**, et al., “*Detection of Antimicrobial Resistance (AMR) and Antimicrobial Susceptibility Testing (AST) using Advanced Spectroscopic Techniques: A Review*”. *TrAC Trends in Analytical Chemistry*, **2024**, 172, 117562,
- 2) Sara Lehmann-Konera, Piotr Zagórski, **Ramia Al Bakain** et al., “*Spatial variability of the hydrochemistry of shallow groundwaters and surface waters of the Rensdyrbekken: A case study of a permafrost catchment in Bellsund (SW Spitsbergen, Svalbard)*”, *Land Degradation & Development*, **2024**, 35(5), 1874- 1887.
- 3) Mohammad Al-Hanini, Zeyad Makhamreh, **Ramia Al Bakain**” *Chemometric Evaluation of Residual Soil Contents: Application to Heavy Metals at Public Parks in Amman – Jordan*”, *Jordan Journal of Earth and Environmental Sciences*, accepted November **2023**.
- 4) Frank Winde, **Ramia Al Bakain, et al.**, “*UN 2023 Water Conference: ISC Policy Brief*”. International Science Council, **2023**. Paris. <https://council.science/publications/water-policy-brief/>
- 5) Suhaib Abu Mualla, **Ramia Al Bakain**, “*Role of chemometric classification for future prediction: Application on different geographical origins of Jordanian Guava*”, *Journal of Food Research*, **2023**, 7 (3), 247-259.
- 6) Ahmad Zakaria, Ramia Al Bakain, Mohammed Rasheed, Mervat El-Hoz; “*Assessment and geographical prediction of sediments origin based on hydrocarbons content: Application to the Gulf of Aqaba and Port of Tripoli*”, *International Journal of Environmental Analytical Chemistry*, **2022**, <https://doi.org/10.1080/03067319.2022.2104640>.
- 7) Moayyad Al-Hyasat, **Ramia Al Bakain**, Jérôme Vial, Didier Thiebaut; “*Geographical Prediction of Parsley Origins Based on Chromatographic Fingerprinting and Quantitative Analysis: Application too Mediterranean Cultivars*”, *American Journal of Chemistry*, **2021**, 11(4), 66-80.
- 8) Rawan H. Al Faqeer, **Ramia Z. Al Bakain**, Mohammed Y. Rasheed, “*Development of New HPLC Method for Analyzing Drugs Used in H-Pylori Treatment*” *Journal of Pharmaceutical Sciences*, **2021**, 14(4), 473-486.
- 9) **Ramia Al Bakain**, Yahya S. Al-Degs, James V. Cizdziel & Mahmoud A. Elsohly, “*Linear Discriminant Analysis based on Gas Chromatographic Measurements for Geographical Prediction of USA Medical Domestic Cannabis*”. *Journal of Acta Chromatographica*, **2021**, 33 (2), 179-187.

- 10) **Ramia Al Bakain**, Yahya S. Al-Degs, James V. Cizdziel & Mahmoud A. Elsohly, ‘‘*Comprehensive Chromatographic Profiling of Cannabis From 23 USA States Marketed For Medical Purposes*’’. *Journal of Acta Chromatographica*, **2021**, 33 (1), 78-90.
- 11) **Ramia Al Bakain**, Yahya S. Al-Degs, James V. Cizdziel, Mahmoud A. Elsohly, ‘‘*Comprehensive classification of USA cannabis samples based on chemical profiles of major cannabinoids and terpenoids*’’. *Journal of Liquid Chromatography & Related Technologies*, **2020**, 43 (5-6), 172-184.
- 12) Mohammad Yasin Mohammad, Ashok Shakya, **Ramia Al Bakain**, M.H. Haroon, M. Iqbal Choudhary, ‘‘*New monoterpene by biotransformation of thymoquinone using Aspergillus niger*’’. *Journal of Bioorganic Chemistry*, **2018**, Volume 80, 212- 215.
- 13) **Ramia Al Bakain**, Yahya Al-Degs, Bertyl Andri, Didier Thiébaud, Jérôme Vial, Isabelle Rivals, ‘‘*Supercritical fluid chromatography of drugs: Parallel factor analysis for column testing in a wide range of operational conditions*’’. *J. Analytical Methods in Chemistry*, **2017**, Vol. 2017, Article ID 5340601, 1-13.
- 14) Bertyl Andri, Amandine Dispas, **Ramia Al Bakain**, Didier Thiébaud, Jérôme Vial, ‘‘*Combination of Partial Least Squares regression and Design of Experiments to model the retention of pharmaceutical compounds in Supercritical Fluid Chromatography*’’. *J. Chromatography A*, **2017**, 1491, 182-194.
- 15) Ayman Issa, Anas Y. Al-Reyahi, **Ramia Al Bakain**, Alan P. Newman, ‘‘*Application of Partial Least Squares-Kernel Calibration in Competitive Adsorption Studies Using an Effective Chemically-Activated Biochar*’’, *Journal of Clean - Soil, Air, Water*, **2017**, 45(4), 1-13.
- 16) Mohammad A. Al-Ghouti, Yahya S. Al-Degs, **Ramia Al Bakain**, ‘‘*Mechanistic and Adsorption Equilibrium Studies of Dibenzothiophene-Rich-Diesel on MnO₂-Loaded Activated Carbon: Surface Characterization*’’, *Journal of Environmental Progress and Sustainable Energy*, **2017**, 36(3), 903-913.
- 17) Yahya S. Al-Degs, **Ramia Al Bakain**, Alan P. Newman, ‘‘*Conventional and Upcoming Sulfur Cleaning Technologies for Petroleum Fuel: A Review*’’, *J. Energy Technology*, **2016**, 4 (6), 679–699.
- 18) **Ramia Al Bakain**, Samer R. Abulateefeh, Mutasem O. Taha, ‘‘*Synthesis and characterization of chitosan-lactate-phthalate and evaluation of the corresponding zinc- and aluminium-crosslinked beads as potential controlled release matrices*’’, *European Polymer Journal*, **2015**, 73, 402-412.
- 19) **Ramia Al Bakain**, Yahya S. Al-Degs, Amjad H. El-Sheikh, and Sharif H. Arar, ‘‘*Spectrophotometric Determination of Melamine in Liquid Milk by Multivariate Second Order Calibration*’’, *Journal of Current Analytical Chemistry*, **2016**, 12(1), 74- 84.
- 20) Ayman A. Issa, Yahya S. Al-Degs, Kholoud Mashal, **Ramia Al Bakain**, ‘‘*Fast activation of natural biomasses by microwave heat*’’. *Journal of Industrial and Engineering Chemistry*, **2015**, 21, 230-238.
- 21) Rund Abu-Zurayk, **Ramia Al Bakain**, Imad Hamadneh, Ammar Al-Dujaili, ‘‘*Adsorption of Pb(II), Cr(III) and Cr(VI) from aqueous solution by surfactant-modified diatomaceous earth: Equilibrium, kinetic and thermodynamic modeling studies*’’, *International Journal of Mineral Processing*, **2015**, 140, 79–87.
- 22) **Ramia Al Bakain**, Yahya S. Al-Degs, Amjad H. El-Sheikh, Anas Y. Al-Reyahi, Asma’a H. Abu-Wardeh, ‘‘*A Quick Detection of Melamine Adulteration in Milk and Dairy Products using First-Order Multivariate Calibration*’’, *Journal of food processing and preservation*, **2015**, 39 (6), 2718-2727.
- 23) Sharif H. Arar, Rasha A. Abu Eid, **Ramia Al Bakain**, ‘‘*Titanium dioxide content in foodstuffs from the Jordanian market: Spectrophotometric evaluation of TiO₂ nanoparticles*’’, *International Food Research Journal*, **2015**, 22(3): 1024-1029.

- 24) **Ramia Al Bakain**, Rund A. Abu-Zurayk, Imad Hamadne, Fawwaz I. Khalili, Ammar H. Al-Dujaili, ‘A study on removal characteristics of o-, m- and p-nitrophenol from aqueous solutions by organically modified diatomaceous earth’, J. Desalination and Water Treatment, **2015**, 56(3), 826–838.
- 25) **Ramia Al Bakain**, Yahya S. AL-Degs, Ayman A. Issa, Saadi Abdul Jawad, Kayed A. Abu Safieh, ‘Activation of Kaolinite with Minimum Solvent Consumption By Microwave Heating’, Journal Clay Minerals, December, **2014**, v. 49(5), 667-681.
- 26) Samer R. Abulateefeh, Mohammad A. Khanfar, **Ramia Al Bakain**, and Mutasem O. Taha, "Synthesis and characterization of new derivatives of alginic acid and evaluation of their iron(III)-crosslinked beads as potential controlled release matrices". Pharmaceutical Development and Technology, **2014**, 19(7): 856-867.
- 27) **Ramia Al Bakain**, Qasem. M. Jaradat and Kamal. A. Momani, “Indoor and Outdoor Heavy Metals Evaluation in Kindergartens in Amman, Jordan”. Jordan Journal of Physics, V 5, Number 1, **2012**, 43-52.
- 28) **Ramia Al Bakain**, Isabelle Rivals, Patrick Sassi, Didier Thiébaud, Marie-Claire Hennion, Guillaume Euvrard and Jérôme Vial, “Impact of the nature of the set of the probe solute on orthogonality evaluation in reversed phase systems”. Journal of Chromatography A. **2012**, 1232, 231-241.
- 29) **Ramia Al Bakain**, Isabelle Rivals, Didier Thiébaud, Marie-Claire Hennion, and Jérôme Vial, “Comparison of different statistical approaches to evaluate the orthogonality of chromatographic separations: Application to reverse phase systems”, Journal of Chromatography A, **2011**, 1218, 2963-2975.

Teaching Courses at the University of Jordan

- General Chemistry (0303101)- **BSc students**
- Laboratory of General Chemistry for non-Chemistry Students (0303109)- **BSc students**
- Laboratory of General Chemistry for Chemistry Students (0303106)- **BSc students**
- Analytical Chemistry (0333211)- **BSc students**
- Laboratory of Analytical Chemistry (0303216)- **BSc students**
- Instrumental Analysis (0343311) - **BSc students**
- Special topic in analytical Chemistry (0353411)- **BSc students**
- Advanced Environmental Chemistry (0333715) – **Master Students**
- Advanced Chromatography (0333913)- **PhD students**
- Chemistry Library Research 391- **BSc students**
- Environmental Analytical Chemistry (0333412)- **BSc students**
- Chemical Research course (0333391)- **BSc students**